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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
O HERN, BRENT T	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
04/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/506,419	RASMUSSEN, OLE-BENDT	
	Examiner	Art Unit	
	Brent T. O'Hern	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *123-148* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *123-148* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/9/2009 has been entered.

Claims

2. Claims 123-148 are pending.

WITHDRAWN REJECTIONS

3. All rejections of record in the Office Action mailed 11/7/2008 have been withdrawn due to Applicant's amendments in the Paper filed 3/9/2009.

NEW REJECTIONS

Claim Rejections - 35 USC § 103

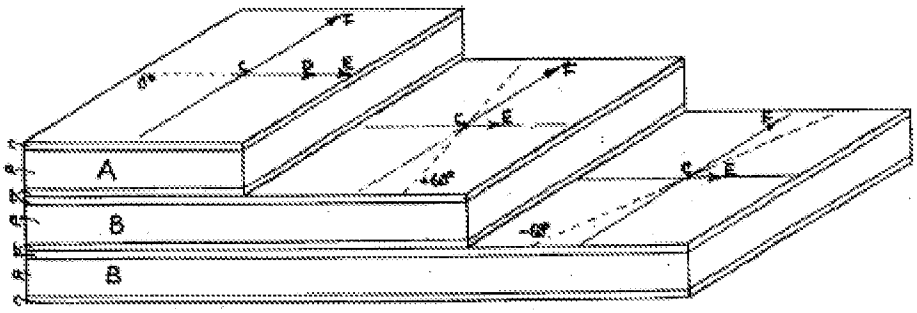
4. Claims 123-127, 129-130, 136-137, 143-144 and 147-148 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (WO 01/96102) in view of Hendrickson (US 4,087,577) and Wynne et al. (US 5,328,743).

It is firstly noted that the language regarding the strand limitations in independent claim 123 is broad with minimal specificity distinguishing the strands as reinforcing strands, non reinforcing strands, ribs, striations, streaks, etc. or whether the strands are flat, round, etc.. Analysis and evidence is lacking regarding any structural differences

for a laminate with strands that are coextruded as opposed to strands that are embedded in a polymeric structure.

Rasmussen ('102) teaches a cross-laminate comprising a first coextruded film having a main direction of uniaxial unbalanced biaxial molecular orientation *(See p. 5, ll. 26-31 and FIG-2, cross laminate with multiple layers and sublayers.)*

FIG.2



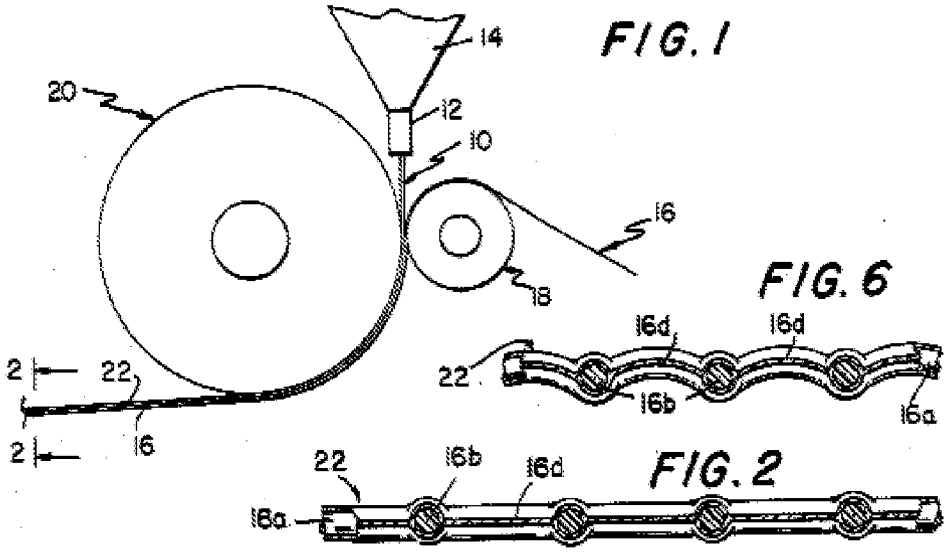
The films A and B comprise heat seal layers #c, main layers #a and lamination layers #b, with individual compositions bonded to each other in the laminate as illustrated in FIG-2 as well as bonding of the layers when the layers are wrapped such as in a gusseted tube. Since the layers have different compositions the bonding and adhesive strengths are different. Since some portions of the laminate are bonded at the seam there are regions of some of the laminate substrates that have additional bonding that is not present in other regions *(See p. 2, ll. 42-58, p. 11, l. 25 to p. 12, l. 14, p. 5, ll. 26-31, p. 6, ll. 1-9 and FIG-2. The Examiner interprets continuous to mean anything such as color, width, length, thickness, surface property, etc.. The claims do not set forth which side of film A is facing any particular side of film B, whether the main layers are the outermost or innermost surfaces of the laminate or just one is on an outermost surface. The claims do not require the strands from film A to be in "direct" contact with*

the strands in film B. Thus, the strands can be in indirect contact or embedded. The claims state the strands intersect each other, however, the strands are not interpreted as intersecting each other in a way that one would ordinary understand intersect to mean. The strands are interpreted as being in either the same or different planes from one another and not required to be in direct contact. Since the separation of the strands includes 0 cm, the strands do not need to be separated at all and a single polymeric layer of any dimension. Since, the strands do not need to be separated then there also does not have to be regions where there are not strands and thus no regions above and below the strands that are directly bonded to each other. There is no apparent difference in the structure between strands that are coextruded and those that are not.), however, fails to expressly disclose wherein the various layers are continuous, having a plurality of strands in films A and B, the bonding being different between the various layers and regions within the layer, a thickness increase of the films A and B at their respective strand locations being at most 20%/(10%) of a film thickness of the films A and B in adjacent regions of the films A and B devoid of their respective strands.

However, Rasmussen ('102) teaches where the structure is made into bags, wherein the layers are continuous when wrapped such as with a gusseted tube and as the layers progress to the opening(s) in the gusseted tube until the layers terminate. Each layer clearly has a pattern whether it is substantially the same, including wave-shaped web with stabilized waves *(See p. 8, ll. 28-32.),* within the layer or upon the bonded and non-bonded areas with various bonding strengths and the additional layers and or/markings will clearly be applied at various regions in a continuous manner to provide for the desired messages *(See p. 6, ll. 1-9.)*. Pigments are added to the various

compositions providing for further patterns *(See p. 11, l. 25 to p. 12, l. 14.)* for the purpose of providing a pleasing, strong bag for containing the packaged goods *(See p. 6, ll. 1-9.)*.

Hendrickson ('577) teaches a polymeric bag reinforced with a two sets of crossing strands of a first polyolefin polymer that may be woven or nonwoven into a grid while the polymeric sheets are made from a different polyolefin polymer, thus, providing for different bonding properties between the sets of strands, top and bottom sheets and between the strands and the sheets *(See col. 3, l. 32 to col. 6, l. 35 and FIGs 2-6, with a bag as illustrated in FIG-5 and strands #16 illustrated in FIGs 2-3 and 6. The strands are clearly capable of being coextruded along with the film without there being any apparent structural difference between coextruded and non coextruded strands.)*



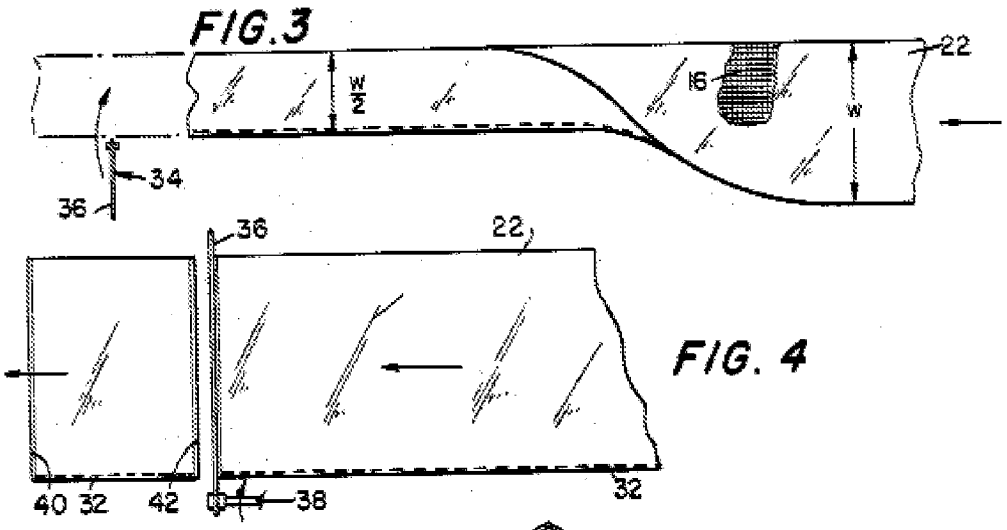


FIG. 4

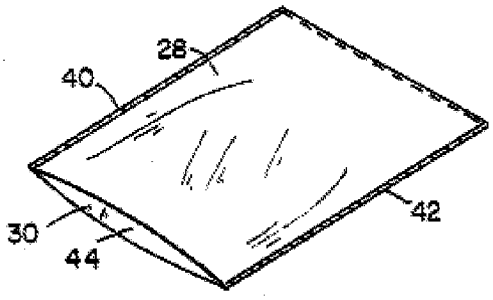
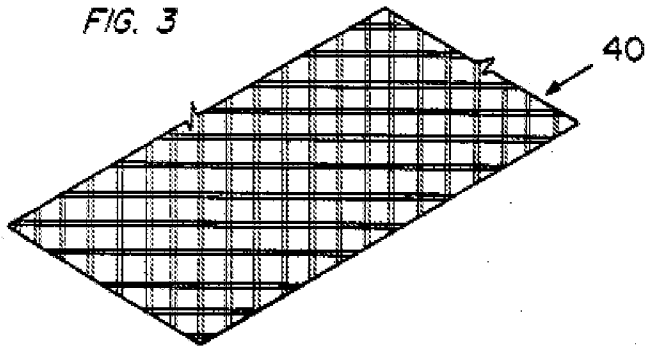


FIG.5

and the thickness of the film and at the location of the strands being the same as at the location between the strands *(See col. 4, l. 57 to col. 5, l. 1.)* for the purpose of providing bags with improved strength and capable of accommodating larger payloads *(See col. 6, ll. 36-61.)*.

Wynne ('743) teaches a polymeric material *(See FIG-3, #40 and col. 5, ll. 5-59.)*



with multiple polyolefin polymeric layers being reinforced with a grid of crossing strands #54A and #54B and #30-32 made of different materials *(See FIGs 4 and 2.)*

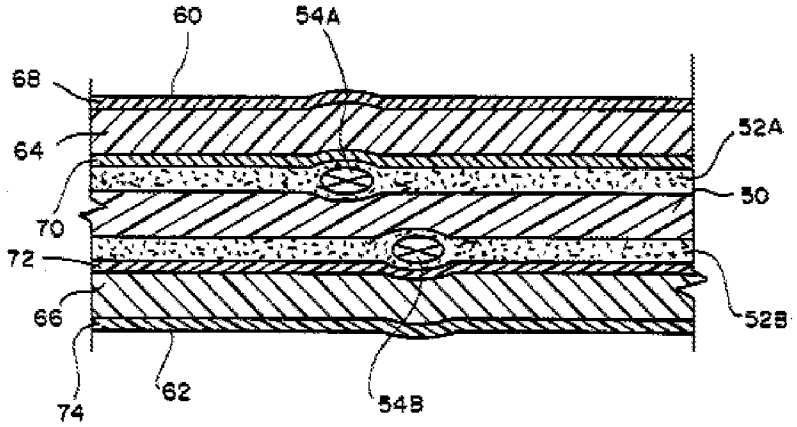
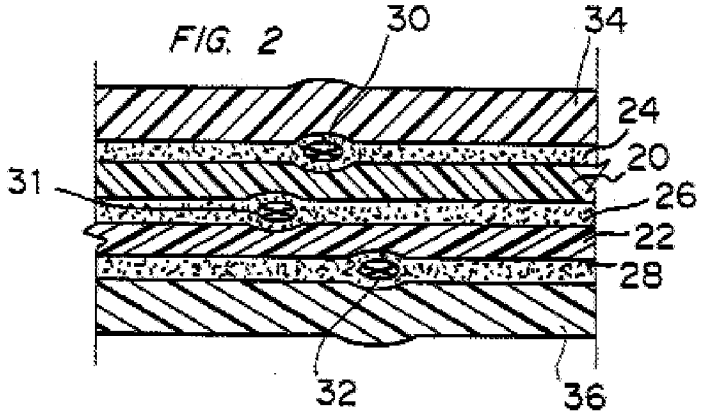


FIG. 4



usable as a packaging material that can be seamed into bags *(See col. 5, ll. 16-59.)* for the purpose of providing a strong, reinforced protective material *(See col. 5, ll. 44-59.)*.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to provide the above structure with a continuous and patterned structure as taught by Hendrickson (‘577) and Wynne (‘743) and obviously taught by Rasmussen (‘102) in Rasmussen (‘102) in order to provide a strong material capable protecting and accommodating larger payloads.

The phrases "a separation between adjacent film A first strands is no more than 8 cm" in claim 123, lines 11-12 and 23-25 are not limiting since they include values of "0 cm" or no separation.

The phrases "adapted to ***" in claim 124, line 3 and claim 143, line 2 do not limit the claims' scope since said language **does not limit the claim to a particular structure** *(See MPEP 2111.04)*.

For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, **"consisting essentially of"** will be construed as equivalent to "comprising". See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355 ("PPG could have defined the scope of the phrase consisting essentially of' for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention."). MPEP 2111.03 Also, If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). The "consists/ (consisting) essentially of" language is used in claim 141, line 2 and claim 142, line 6.

5. Claim 128, 131-135 and 141 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (WO 01/96102) in view of Hendrickson (US 4,087,577), Wynne et al. (US 5,328,743) and Lappala (US 2,851,389).

Regarding claim 128, Rasmussen (102), Hendrickson ('577) and Wynne ('743) teach the laminate discussed above, however, fail to expressly disclose where a collective area of the film A first strands and film B first strands comprises no more than 60% of a surface area of their respective film sides.

However, Lappala ('389) teaches a strand reinforced layered structure where any suitable diameter strand may be used *(See col. 2, l. 45, any suitable diameter can be used.),* which clearly changes the above area ratio. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to select a strand with a diameter that provides the above area ratio as taught by Lappala ('389) for the purpose of providing a laminate that is light and strong *(See col. 1, ll. 25-28.)*.

Regarding claims 131-133, Rasmussen (102), Hendrickson ('577) and Wynne ('743) teach the laminate discussed above, however, fail to expressly disclose wherein a volume of the film A strands and the film B strands is not greater than 15%/(10%)/(5%) of a volume of their respective films.

However, Lappala ('389) teaches that any suitable diameter strand may be used *(See col. 2, l. 45, any suitable diameter can be used.),* which clearly changes the volume. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to select a strand with a diameter that provides the above volume as taught by Lappala ('389) for the purpose of providing a laminate that is light and strong (See *col. 1, ll. 25-28.)*.

Regarding claims 134-135, Rasmussen (102), Hendrickson ('577) and Wynne ('743) teach the laminate discussed above, however, fail to expressly disclose the

separation between first strands on films A and B is between 2 mm and 40 mm/(at the highest 20 mm) measured from the middle of one strand to a middle of an adjacent strand.

However, Lappala ('389) teaches that any suitable pattern may be used *(See col. 2, l. 49-51, any suitable pattern.)* for the purpose of providing a laminate that is light and strong (See *col. 1, ll. 25-28.)*.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to select a suitable pattern that provides the above separation as taught by Lappala ('389) in Rasmussen (102) in order to provide a laminate that is light and strong.

Regarding claim 141, Rasmussen (102), Hendrickson ('577) and Wynne ('743) teach the laminate discussed above, however, fail to expressly disclose wherein the main layer of each of the two films A and B consists essentially of polyethylene or polypropylene.

However, Lappala ('389) teaches wherein the main layer of each of the two films A and B is polyethylene *(See col. 2, l. 31 and ll. 66-67.)* for the purpose of providing a laminate that is light and strong *(See col. 1, ll. 25-28.)*.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide polyethylene layers as taught by Lappala ('389) in Rasmussen (102) in order to provide a laminate that is light and strong.

6. Claim 138-140 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (WO 01/96102) in view of Hendrickson (US 4,087,577), Wynne et al. (US 5,328,743) and Cederblad et al. (US 6,204,207).

Rasmussen (102), Hendrickson ('577) and Wynne ('743) teach the laminate discussed above, however, fail to expressly disclose wherein an average melting point of the third polymer material and average melting point of the sixth polymer materials are at least about 10°C/(15°C) /(20°C) lower than an average melting point of the first polymer material and an average melting point of the fourth polymer material.

However, Cederblad ('207) teaches a strand reinforced polymer structure where the average melting point of the polymer material of the layers of the films differ *(See col. 12, ll. 38-53.)* for the purpose of providing firm and light bonds *(See col. 6, ll. 60-67.)*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to provide strands with melting points below that of the films as taught by Cederblad ('207) in Rasmussen (102) in order to produce a laminate with firm and light bonds.

7. Claim 142 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (WO 01/96102) in view of Hendrickson (US 4,087,577), Wynne et al. (US 5,328,743), Rasmussen (US 4,039,364), Velazquez (US 5,614,297) and Cederblad et al. (US 6,204,207).

Rasmussen ('102), Hendrickson ('577) and Wynne ('743) teach the laminate discussed above, and Rasmussen ('364) teaches a laminate wherein the main layers are made from HDPE, LLDPE or a blend of the two *(See col. 13, ll. 3-7.)* and the

strands in the first surface layers of the films is a polymer made from a copolymer of ethylene *(See col. 13, ll. 11-30.),* however, fail to expressly disclose wherein the bonding layers comprise LLDPE in admixture with 5 - 25% of a copolymer of ethylene having a melting point or a melting range within the temperature range of 50 - 80 ^{o}C, the strands comprise a polymer with a copolymer of ethylene having a melting point or a melting range within the temperature range of 50 - 100 ^{o}C or a blend of such copolymer and LLDPE containing at least 25% of the copolymer.

However, Velazquez ('297) teaches a polyolefin stretch film having bonding layers comprising LLDPE in admixture with 5 - 25% of a copolymer of ethylene having a melting point or a melting range within the temperature range of 50 - 80 ^{o}C *(See col. 8, ll. 26-47 and col. 3, l. 46.)* for the purpose or providing a film that can be laminated with one or more films *(See col. 6, ll. 13-17.)*.

Furthermore, Cederblad ('207) teaches wherein the layers comprising a copolymer of ethylene having a melting point or a melting range within the temperature range of 50 - 100 ^{o}C *(See col. 12, l. 42 wherein the melting point is 67 ^{o}C /152 ^{o}F.)* for the purpose of forming firm bonds *(See col. 6, l. 63.)*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide a laminate with a surface layer of LLDPE and ethylene with the above melting point range and the above strands as taught by Velazquez ('297) and Cederblad ('207) in Rasmussen ('102) in order to provide a bondable laminate as described above.

8. Claim 145 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (WO 01/96102) in view of Hendrickson (US 4,087,577), Wynne et al. (US 5,328,743) and Johnston (US 3,340,128).

Rasmussen (102), Hendrickson ('577) and Wynne ('743) teach the laminate discussed above, however, fail to expressly disclose wherein the polymer material of the strands of at least one of the films A and B includes colored material that makes the colored strands visible through at least one side of the cross-laminate.

However, Johnston ('128) teaches a strand reinforced structure where the polymer material of the strands of at least one of the arrays comprises coloration material in sufficient amount to render the at least one colored layer visible through at least one side of the cross-laminate *(See col. 24, l. 58.)* for the purpose of providing a decorative motif *(See col. 24, ll. 59-60.).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention was made to provide strands with coloration as taught by Johnston ('128) in Rasmussen (102) in order to provide a product having a decorative motif.

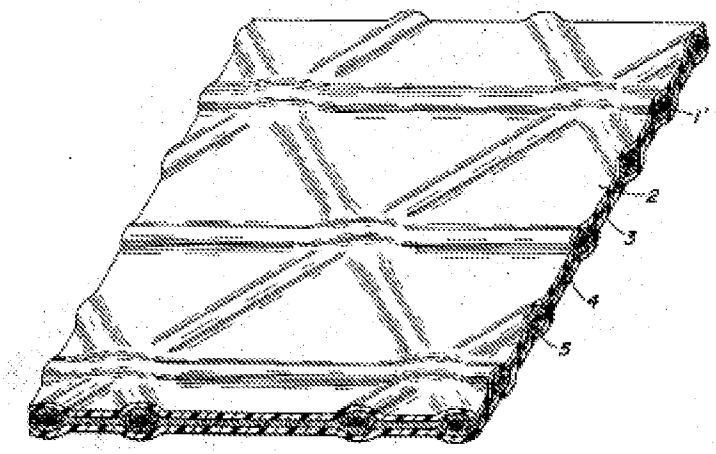
9. Claim 146 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasmussen (WO 01/96102) in view of Hendrickson (US 4,087,577), Wynne et al. (US 5,328,743), Johnston (US 3,340,128) and Lappala (US 2,851,389).

Rasmussen (102), Hendrickson ('577), Wynne ('743) and Johnston ('128) teach the laminate discussed above, however, fail to expressly disclose wherein the cross-laminate has a thickness at its thickest of about 0.3 mm, and: wherein an exterior surface of the film A is corrugated to form a visible pattern of striations extending in one

direction, where a spacing of the striations being at most about 3 mm: the main layer and the bonding layer of the film A are substantially transparent to enable the colored strands to be visible when the laminate is observed from one of the exterior surfaces of the cross-laminate, and a depth of the corrugations is sufficient to impart a three-dimensional effect to the cross- laminate such that the strands appear to be spaced internally from the exterior surface of the film A a distance substantially greater than an actual maximum thickness of the film A.

However, Lappala ('389) teaches a strand reinforced layered structure where the laminate thickness at its thickest is about 0.3 mm *(See col. 3, ll. 34-35 and col. 2, l. 45 wherein the films are less than 0.015 in (0.381 mm).)*, the main layer and the bonding layer of the film A are substantially transparent to enable the colored strands to be visible when the laminate is observed from one of the exterior surfaces of the cross-laminate *(See FIG-3, #2.)*, where the spacing of the striations being at most about 3 mm *(See FIG-3, corrugations created by strands.)* the main layer and the bonding layer of the film A are substantially transparent to enable the colored strands to be visible when the laminate is observed from one of the exterior surfaces of the cross-laminate, and the depth of the corrugations being sufficient to impart a three-dimensional effect to the cross-laminate such that the strands appear to be spaced internally from the exterior surface of the film A a distance substantially greater than an actual maximum thickness of the film A *(See col. 2, l. 7.),* for the purpose of providing a laminate that is light and strong *(See col. 1,ll. 25-28.)*.

FIG. 3



Therefore, it would have been obvious to a person of ordinary skill in the art the time of Applicant's invention to provide such a spacing and configuration as taught by Lappala ('389) in Rasmussen (102) in order to provide a light and strong laminate.

ANSWERS TO APPLICANT'S ARGUMENTS

10. In response to Applicant's arguments *(See pp. 11-21 of Applicant's Paper filed 3/9/2009.)* regarding Rogosch ('764) and Britton ('184), it is noted that said references are no longer cited, thus, said arguments are moot.

11. In response to Applicant's arguments *(See pp. 11-21 of Applicant's Paper filed 3/9/2009.)* regarding the references other than Rogosch ('764) and Britton ('184), it is noted that no further specific arguments are presented other than those made of record. The arguments are substantially directed towards the strand limitations as previously cited by Rogosch ('764) and Britton ('184).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571)272-0496. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brent T. O'Hern/
Examiner
Art Unit 1794
April 23, 2009